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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/756,140      | 01/09/2001  | Kazumasa Ueda        | 2185-0499P          | 6542             |

2292            7590            08/26/2003  
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EXAMINER

MARCHESCI, MICHAEL A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|          | 1755         |

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                      |                  |  |
|------------------------------|----------------------|------------------|--|
| <b>Office Action Summary</b> | Application No.      | Applicant(s)     |  |
|                              | 09/756,140           | UEDA ET AL.      |  |
| Examiner                     | Michael A Marcheschi | Art Unit<br>1755 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 04 June 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1 and 4-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 4-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>11</u> . | 6) <input type="checkbox"/> Other: _____                                    |

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**PREVIOUS REJECTIONS:**

Claims 1, 4, 5 and 11-17 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wang et al. (US 2002/0077035) for the same reasons set forth in the previous office cation which are incorporated herein by reference.

Claims 6-10 and 18-19 are rejected under 35 U.S.C. 103(a) as obvious over Wang et al. (US 2002/0077035) for the same reasons set forth in the previous office cation which are incorporated herein by reference.

**NEW REJECTIONS:**

Claims 1, 11-14 and 16-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 99/64572.

The WO reference teaches in the abstract and page 3, line 39-page 4, line 21 and page 6, lines 6-21, an aqueous polishing composition (i.e. abrasive for metal) that comprises a polymer particle that can contain at least one of the claimed functional groups.

The claimed invention is anticipated by the reference because said reference teaches a polymer particle that contains at least one of the claimed functional groups, thus reading on a polymer particle having a functional group that traps a metal. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary.

Claim 15 is rejected under 35 U.S.C. 103(a) as obvious over WO 99/64572.

The WO reference teaches the use of inorganic abrasive particles and this reads on claim 15 because it is the examiners position that this (abrasive particle) encompasses and therefore makes obvious spherical particles because inorganic abrasive particles, in general, are spherical in nature in the absence of any evidence showing the contrary.

Claims 1 and 11-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 919602.

The EP reference teaches in the abstract and in sections [0020]-[0034], an aqueous polishing composition (i.e. abrasive for metal) that comprises a spherical polymer particle that can contain at least one of the claimed functional groups.

The claimed invention is anticipated by the reference because said reference teaches a polymer particle that contains at least one of the claimed functional groups, thus reading on a polymer particle having a functional group that traps a metal. With respect to claim 15, the reference teaches that spherical particle are use and although they are one in the same as the resin particles, no patentable distinction is seen to exist because both of the claimed limitations are met. In addition, the claims do not differentiate between the polymer particle and the spherical particle, thus the broad interpretation of the claims is that these two particles can be the same. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary.

Claims 1, 4, 11, 18 and 19 are rejected under 35 U.S.C. 102(b) as anticipated by applicants own admission defined in the examples (trade names).

Applicants admit that the claimed polymer particles are known.

Although these particles are not defined as abrasives, no distinction is seen to exist because the particles are known, irrespective of what they are called. The instant claims only define that a polymer having functional groups for a metal is used in the (abrasive) composition i.e. no other component is present in the composition). The examples clearly define that the only component of the abrasive composition is known and therefore these trade names anticipate the claims because, as defined above, the polymer is known, irrespective of what it is called. In other words, the name assigned to a polymer (i.e. abrasive) does not impart patentability to that polymer.

Claims 1, 4, 11, 18 and 19 are rejected under 35 U.S.C. 102(b) as anticipated by Kurematsu et al.

Kurematsu et al. teach in column 2, line 14+ that the claimed polymers are known.

Although these polymers are not defined as abrasives, no distinction is seen to exist because the polymers (solid) are known, irrespective of what they are called. The instant claims only define that a polymer having functional groups for a metal is used in the (abrasive) composition i.e. no other component is present in the composition). The reference clearly defines that the only component of the abrasive composition is known and therefore these polymers anticipate the claims because, as defined above, the polymer is known, irrespective of

what it is called. In other words, the name assigned to a polymer (i.e. abrasive) does not impart patentability to that polymer.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as obvious over either (1) applicants own admission defined in the examples (trade names) or (2) Kurematsu et al.

These teachings fail to define the size of the polymers.

The size of the polymer is considered to be dependent on the end use of the polymer and do not impart any patentable subject matter to the claims absent evidence to the contrary.

Applicant's arguments filed 6/4/03 have been fully considered but they are not persuasive.

Applicants argue that Wang et al. fails to teach the claimed functional group that traps a metal ion. The examiner disagrees because it can be seen from the disclosure in section [0038] of the reference that the monomers used to make the resin include one having a amide group (i.e. one of the claimed functional groups). In view of this, a resin having the claimed functional group is known and used. In addition, this section defines other monomers which have groups that also read on the claimed groups. Finally, in the last 4 lines of section [0032] and lines 5-9 of section [0033] of the reference, it is clearly taught that the functional groups **capture (trap)** materials (i.e. metals) during CMP. This disclosure broadly reads on the claimed invention because the above teaching reads on a resin particle having a functional group that traps a metal.

The examiner acknowledges the declaration as previously submitted (submitted on 9/23/02), but this declaration is insufficient because (1) a 1.132 declaration of unexpected results

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can not be used to overcome a 102 rejection, (2) for the 103 rejections, this declaration does not compare a significant amount of the claimed functional groups (only one specific functional group is used in the declaration), whereas the claims define numerous functional groups. In view of this, the declaration is not seen to provide unexpected evidence for all of the functional groups as claimed and (3) for a 103 rejection, applicants have not compared the claimed invention to the closest prior art. In view of this, the declaration is not seen to provide unexpected evidence for all of the functional groups as claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action (new art rejections). Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548.

Evidence of unexpected results must be commensurate in scope with the subject matter claimed.

*In re Linder* 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (703) 308-3815. The examiner can be normally be reached on Monday through Thursday between the hours of 8:30-6:00 and every other Friday between the hours of 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Mark L. Bell, can be reached at (703) 308-3823.

Amendments can also be sent by fax to the numbers set forth below:

For after final amendments, the fax number is (703) 872-9311;

For non-final amendments, the fax number is 703 872-9310.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Michael Marcheschi

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8/03

MICHAEL MARCHESCHI  
PRIMARY EXAMINER